

Fort Snelling State Park "Upper Bluff" Reuse Study

Prepared by
the Fort Snelling State Park Upper Bluff Consultation Team
and Thomas R. Zahn & Associates

2006 Update by Miller Dunwiddie Architecture



Fort Snelling State Park Upper Bluff Reuse Study

Prepared by
the Fort Snelling State Park Upper Bluff Consultation Team
and Thomas R. Zahn & Associates

Update Information by Miller Dunwiddie Architecture
note: all 2006 update information is in this color text and font

The consultation was initiated and coordinated by the Minnesota Department of Natural Resources.
The project was also done in cooperation with the Minnesota Historical Society.
November 1998

The update to the 1998 reuse study was initiated by Hennepin County.

June 2006

Table of Contents

<i>Executive Summary</i>	Vision Statement	1	8
	Alternative Reuses Studied	5	12
	General Recommendations	5	12
	Building and Site Reuse Recommendations	7	14
<i>Study Introduction</i>	Study Concept	9	16
	Study Purpose	10	17
	Consultant Team	10	17
	Study Process	13	20
<i>Historic Background & Existing Conditions</i>	Chronology of Events	17	24
	Historic Overview	21	28
	Architecture	24	31
	Fort Snelling State Park • Upper Bluff Area Map	24	31
	Building Descriptions	25	32
	Architectural Context	35	42
	Existing Site Conditions	38	45
	Building Conditions	40	47
<i>Issue Analysis</i>	Archaeological Issues	43	51
	Airport Issues	43	51
	Noise Monitoring Chart	47	56
	Noise Abatement	47	56
	Education Issues	48	57
	Historical Significance Issues	49	58
	Legal Issues	51	60
	Multiple Building & Multiple User Issues	52	61
	Political Issues	53	62
	Preservation Issues	54	63
	Recreation Issues	55	64
	Tourism Issues	57	66
	Transportation Issues	59	68
	Development Issues	60	71
	Project Management Issues	63	74

<i>Economic Analysis Projections</i>	Introduction	65	76
	<i>Building Analysis and Cost Estimate Spreadsheet</i>	66	77
	<i>Key to:</i>		
	<i>Building Analysis and Cost Estimate Spreadsheet</i>	68	79
	Break Even Analysis for Private Development		
	<i>Barrack Building # 1 0 1</i>	73	85
	Break Even Analysis for Private Development		
	<i>Officer's Quarters, Building # 1 5 2</i>	76	88
 <i>Alternatives Uses</i>	Introduction	79	91
	Alternatives	80	92
	Different Scenarios for the Upper Bluff	81	93
 <i>Potential Sources for Funding</i>		83	95
 <i>Implementation Strategy</i>	Introduction	87	99
	Implementation Activities	89	101
	Implementation Phasing	94	107
 <i>Appendices</i>	Reuse Worksheets	97	110
	List of Preparers, Contributors and Consultants	105	118
 <i>Bibliography</i>		106	119
 <i>2006 Update Appendices</i>	<i>Appendix A: Photo Contact Sheets</i>		
	<i>Appendix B: Field Reports (27 total)</i>		
	<i>Appendix C: 2006 Update Cost Analysis</i>		
	<i>Appendix D: Structural Analysis</i>		
	<i>Appendix E: Concept Design Building No. 67</i>		
	<i>Appendix F: Concept Design Building No. 151</i>		
	<i>Appendix G: Utility Map</i>		

Reuse Study Guidelines

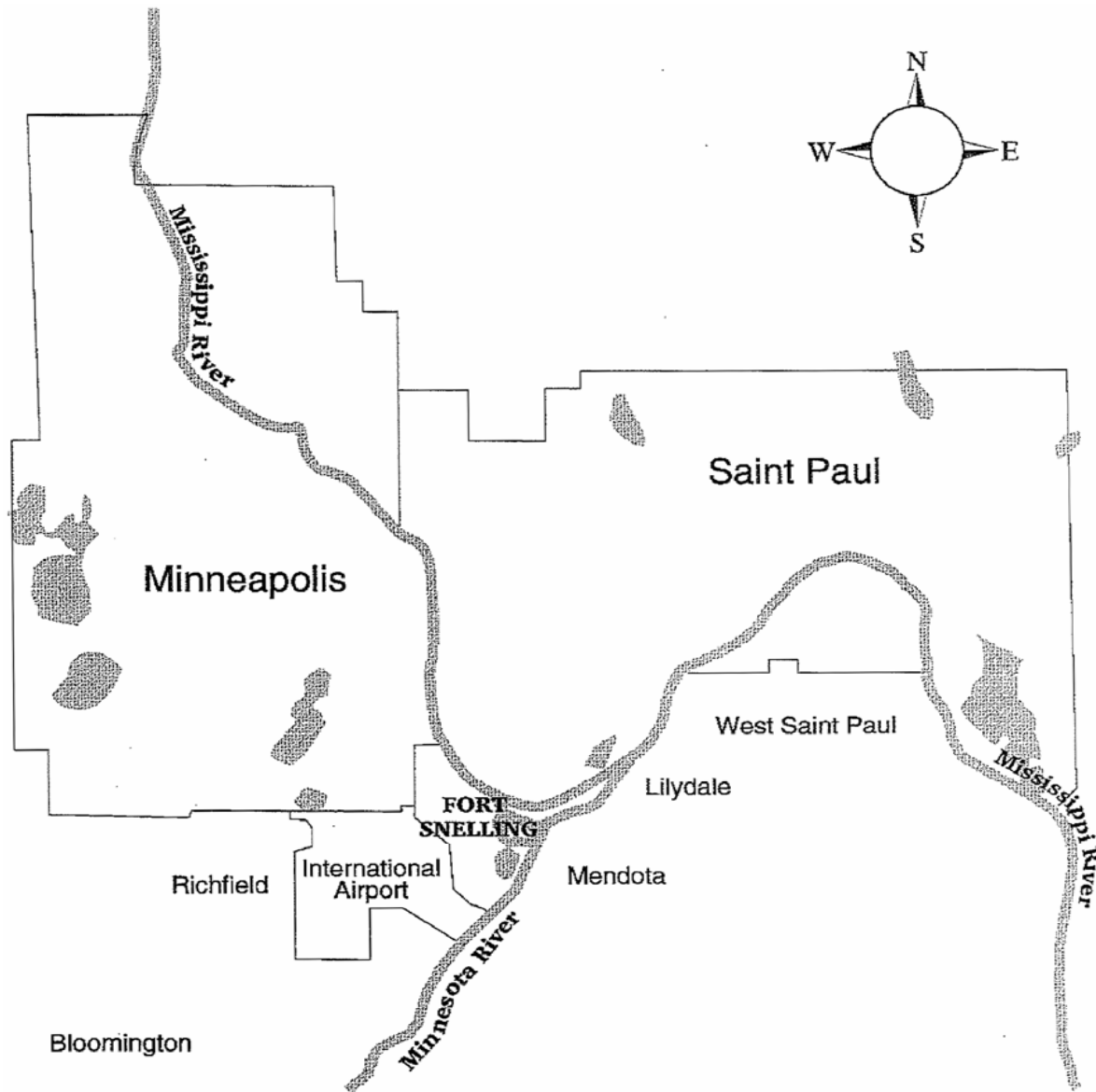
The reuse process requires a delicate balance of many design and political factors to guarantee that the final report represents a thorough, unbiased and practical analysis of the site under study. To clarify this process a number of tenets need to be stressed. Reuse studies are:

- **Locally Initiated**-The reuse study process originates through a community's or local group's request for help.
- **Independent**-Once the process begins, the report and its conclusions are the responsibility of the reuse study consultation team.
- **Objective**-The consultation team enters the process without preconceived recommendation(s) for reuse.
- **Analytical**-The purpose of the reuse study process is to gather information and form recommendations through an analysis of that information. This analysis includes identifying needs and opportunities within the context of physical and political constraints.
- **Inclusive**-The consultation team actively seeks a variety of opinions in its attempt to develop sound and unbiased recommendations for reuse.
- **Preservation oriented** -The process assumes the preservation of the buildings under study, however, loss of a building due to the lack of an economically viable reuse is always a possibility.
- **Locally Implemented** - Once the consultation is completed and the report printed, it is the responsibility of the community/local group to determine which recommendations can and should be implemented. It is ultimately their responsibility to preserve and protect the historic resource that provides focus to their community's history.

Abbreviations used in this study include:

BOQ	Bachelor Officer's Quarters
DBL	Decibels
DNL	Day-Night Level (decibels)
EIS	Environmental Impact Statement
ELC	Environmental Learning Center
FAA	Federal Aviation Administration
GCSF	Gross Construction Square Feet
GSA	General Services Administration
GRSF	Gross Rentable Square Feet
HPTC	Historic Preservation Training Center
HUD	Federal Department of Housing and Urban Development
ISTEA	Intermodal Surface Transportation Efficiency Act
L&WCF	Land and Water Conservation Fund
LCMR	Legislative Commission on Minnesota Resources
LRT	Light Rail Transit
LTCP	Long Term Comprehensive Plan
MAC	Metropolitan Airport Commission
MHS	Minnesota Historical Society
MnDNR	Minnesota Department of Natural Resources
MnDOT	Minnesota Department of Transportation
MNRRRA	Mississippi National River Recreation Area
MOA	Mall of America
MPCA	Minnesota Pollution Control Agency
MPRB	Minneapolis Park and Recreation Board
MSP	Minneapolis/Saint Paul International Airport
NHL	National Historic Landmark
NPS	National Park Service
NRHD	National Register Historic District
NRHP	National Register of Historic Places
PAST	Preservation Advisory Services Team
TAB	Transportation Advisory Board
TIF	Tax Increment Financing
WPA	Works Progress Administration

*Fort Snelling
& the Metropolitan Area*



Executive Summary

The Upper Bluff area of Fort Snelling State Park is one of Minnesota's, and the nation's, most historic and culturally important sites. It is also one of the most underutilized historic resources within the state. The purpose of the Upper Bluff study is to help the MnDNR determine the feasibility of reuse for these significant buildings and the surrounding 141 acres.

The Minnesota Reuse Consultation Team is a technical assistance program styled after the Preservation Advisory Services Team (PAST) program of the Midwest Regional Office of the National Trust for Historic Preservation. The Minnesota Team concept was developed to provide preservation consultation to communities and government agencies within the State needing professional help in determining the feasibility of reuse for their threatened historic buildings and sites. Since 1988 there have been over 25 successful reuse studies completed in Minnesota.

For the Upper Bluff study the consultation team was composed of a variety of “built environment” professionals. The range of team disciplines and interests was dictated by the complexity of contexts presented by the Fort Snelling Upper Bluff Area. Consequently, team disciplines included recreational planning, tourism planning, landscape planning, preservation, and historical architecture, park management and economic specialists.

In December of 1997 the team convened at Fort Snelling State Park to identify potential new uses and users for the structures and surrounding acreage, and to develop a guide for the realization of those uses. During the five day on-site portion of the study the team held over 35 interview sessions, with over 50 interviewees participating in the process.

Miller Dunwiddie Architecture, Inc. (MDA) was asked by Hennepin County to re-examine the study that MDA, Thomas R. Zahn & Associates, and others produced in 1998. This update to the 1998 study consists of an evaluation of each of the buildings through site visits, a new cost analysis for each, and updates as necessary throughout the report.

Through site visits, notes and photographs, MDA assessed each of the buildings using a ranking system of 0-5, which slightly modifies the 1-5 system used in the 1998 study. On the whole, the buildings have deteriorated approximately one point in the past eight years. The cost to rehabilitate the buildings has increased due to a combination of further deterioration and inflation by over 40% from a range of \$33 to \$43.5 million to a range of \$47 to \$65 million. Only one building, No. 63 Quartermasters Shop, has passed the point of feasible repair.

The greatest threat to the buildings is that of water that penetrates the exteriors and causes rot of the wood structural members and/or freeze-thaw damage to masonry. Whereas the partial collapse of Building No. 63 is the most dramatic result of rot damage, the floor and roof structures of many other buildings now show gaps to the outside, unsafe and sagging floors, and buckled finish flooring, all of which are the result of water damage. However, despite these types of local conditions, the wood framing members of the buildings appear to generally be in good condition at the present time.

Vision Statement **The reuse team developed vision statements which describe the “best future” for this 141 acre site and its collection of 28 historic buildings. Vision statements clearly highlight both the importance and the potential of the Upper Bluff, themes which might otherwise be lost in a public policy discussion rife with complex and practical issues which need to be resolved. While the body of this study will identify these complex and practical issues and deal with them in realistic ways, the primary motivation for resolving these issues is to advance that time when the visions become reality. It is important to remember that the visions, although stated as separate entities, compliment one another.**

Common Conditions for Visions

- The Upper Bluff and its four distinct components: Officers Row, Area J, golf course, and polo grounds constitute a unique mix of historic buildings and recreational amenities not to be found anywhere else in Minnesota. The close proximity and easy access of this site to 60% percent of the state's population, combined with its unique mix and unquestioned historical significance, make the site a priority candidate for a sensitive reuse plan.
- The Upper Bluff is a historical and operational extension of Old Fort Snelling, an extension which partially served the military needs of the United States throughout the Civil War, the Western Expansion, the Spanish American War, and both World Wars. The Upper Bluff is a site which has significantly influenced state, regional, national and international affairs. Any proposed reuse for the site must acknowledge and maintain these historic connections.
- The historical significance of the buildings is primarily derived from their interrelationships as a group rather than from individual buildings. It is imperative therefore that any reuse plan preserve and reuse all or most of the existing buildings.
- The portion of Taylor Avenue which fronts both Officer's Row and three Enlisted Barracks is a very significant streetscape which must be preserved for future generations. Inclusion of the Post Headquarters Building is a logical addition to this streetscape.
- The Polo Grounds, which currently provides a number of public playing fields, must remain as open space unencumbered with buildings and available to future generations for recreational and exposition purposes.
- It is imperative to maximize use of existing on-site open space for recreational uses. In addition, the existing open space should be expanded by the acquisition of additional lands as they become available (i.e. such as the lands west of Bloomington Road).

VISION I

The historical significance of the Upper Bluff is a story that should be expressed by every means available so that all Minnesotans recognize the irretrievable loss of their common heritage if this unique mix of historic buildings, streetscape, and open space is lost for public use.

Citizens of Minnesota are made aware of the rich history of the Upper Bluff and the role played by Fort Snelling in opening up the Dakotas and Montana. Themes like Custer, the Buffalo Soldiers, and supply lines to frontier forts will be developed to lend substance to the Upper Bluffs claim to fame. If old Fort Snelling is the crucible of modern Minnesota, then the Upper Bluff represents seasoning and maturity of a new state (Minnesota) and of a new nation, the United States of America, as both progressed from raw frontier outposts to the status of major players in the modern world: The rise of both coincided with the development and expansion of Fort Snelling in the Upper Bluff between 1870 and 1920.

Making the general public aware of this is an important step toward reversing the current status of the Upper Bluff. It will take strong political support to generate the financial and other resources necessary to do justice to the Upper Bluff. It will take a major educational effort to make the case to the general public that investment of these resources is highly desirable. An important part of this vision is the growing public support to pro-actively intervene toward the end of converting the buildings and site for appropriate reuse, rather than continuing the current course of "benign neglect."

VISION II

The historic buildings will be stabilized pending the completion of all rehabilitation work necessary to reach one to its appropriate reuse.

Regardless of the eventual reuse for each individual building, it is important to make the commitment now to provide the financial resources to secure the buildings against vandalism, to repair roofs, and to make other such repairs necessary to protect them from additional physical deterioration until such time as major renovations can be undertaken. An important element of this vision is obtaining the funding to stabilize each building to prevent further deterioration in the process.

After the 1998 study, all doors and all first floor windows were secured. Some unauthorized entry continued, and vandalism occurred to second floor window glazing.

VISION III

The process leading to appropriate reuse of each individual building will involve three distinct components: (1) the educational opportunities inherent in the reuse construction phase, (2) the return of each building to active, although in most cases different uses, and (3) upgrading infrastructure including roads, utilities, police and fire protection, and connection with mass transit.

Part of the return to the general public of a restored Upper Bluff is the educational and training opportunities that will be available to interested citizens during the rehabilitation process.

This vision foresees a Historic Preservation Technology Center in place which uses the actual rehabilitation of each of the buildings as a laboratory where students in a certified curriculum gain hands-on experience on how to rehabilitate historic buildings. Each building will be rehabilitated according to the specifications of a specific tenant. A viable reuse for some of the buildings is as a conference and training center. Such a center would build upon a number of positive attributes, including: the availability of over 350,000 square feet for development, the campus arrangement of the buildings, recreational amenities, a nine hole golf course, a large open space with the flexibility to be used for team sports as well as for major outdoor expositions, proximity to 60% of the state's population; plus, an authentic history related to both site and buildings. The vision here is that an appropriate developer can be found to develop a conference center which builds on the existing attributes of the Upper Bluff Area.

All necessary utilities will be upgraded in a timely fashion so that the users of the restored buildings have a complete and modern infrastructure in place.

VISION IV

The nine hole golf course and athletic fields will be improved and remain for public use.

The golf course and playing fields provide for a variety of recreational and cultural needs. Providing the public the use of these facilities was a major rationale for transferring administrative control of the Upper Bluff from the military to the MnDNR. The wisdom of this transfer has been borne out by the heavy use of these facilities over the years.

Alternative Reuses Studied

The following alternatives were evaluated for analysis during the on-site component of the reuse study.

- **Public reuse**-This alternative assumes that the buildings and grounds should be put back into service with a public use only. Discussed was the renovation of the buildings for uses such as governmental offices, military museums, and nonprofit organization offices.
- **Recreation reuse**-This alternative assumes the possible demolition of some or all of the buildings on the 141 acre site to meet expanding recreational and open space needs for the metropolitan area.
- **Education reuse**-This alternative assumes that the buildings be put to educational reuses. The site could provide a home for alternative education, continuing education, and/or technical training. The *Governor's Residential Academy Program*, charter schools and an Historic Preservation Technology Center would fit into this category.
- **Business reuse**-This alternative assumes that the buildings could support a variety of commercial reuses. Once renovated, the buildings would certainly project the image of stability, status and quality of design that a commercial tenant might seek. Proposed uses discussed included, but were not limited to, a conference and training center, offices and bed-and breakfast inns.
- **Multipurpose reuse**-This alternative assumes a combination of two or more of the above listed uses. Discussed was the appeal of a public/private reuse such as an Historic Preservation Technology Center, military museums, the *Residential Academy*, charter schools, and a conference and training center.

General Recommendations

After reviewing the above alternatives and subsequent use analysis, the team makes the following recommendations on the potential reuse of the Fort Snelling State Park Upper Bluff site. The team stresses the significance of this important historic resource to the state and to the nation. The architectural analysis determines that the majority of the buildings could be put back into use assuming that the cost of renovation of the extant buildings could be met through a public/private cooperation. *Also, the Department of Natural Resources (MnDNR) has indicated a need to maintain a revenue producing component to the reuse of the Upper Bluff. The revenue would provide income for State Park operations and planning.*

1. **The Minnesota Department of Natural Resources (MnDNR), the Minnesota Historical Society (MHS) will work together with the National Park Service (NPS) and other agencies and private interests to realize the reuse recommendations.**

2. The Team recommends that a deed modification be made that allows uses in addition to recreation on the site. If historic building and landscape preservation is in fact a desired long-range goal, then it seems highly unlikely that this goal can be achieved with the existing deed in place. Allowing a public/private mix of uses seems very desirable from a number of standpoints, and is not unprecedented at other locations around the country.

Currently Hennepin County and the MnDNR are discussing the possibility of transferring the designation of the Upper Bluff area from a Parks to Lands program to a Historic Monuments program. Under the Historic Monuments program, the buildings on the site could be leased for non-recreational uses.

3. Because of the complexity inherent in developing the site and its vacant buildings, it is recommended that a project implementation team be secured to guide the realization of the recommendations for reuse. Their responsibilities would include, but not be limited to:

- **developing a master plan outlining an approach and timetable for the rehabilitation of the buildings,**
- **marketing the site to appropriate local, regional, national and international interests,**
- **coordinating any private or semi-private reuse of any open space on the 141 acres,**
- **working with the MnDNR, the Minnesota Historical Society, the University of Minnesota, regional vocational schools and trade interests to explore the feasibility of establishing an Historic Preservation Technology Center at the site,**
- **working to secure public or private interest in developing a conference and training center on the Upper Bluff,**
- **working with state agencies to determine the feasibility of using a portion of the building for educational uses such as the Governor's Residential Academy, charter schools, and an Urban Environmental Learning Center,**
- **working with museum interests in securing adequate quarter for their collections once appropriate buildings have been rehabilitated,**
- **seeking additional tenants (public and private) for the site's remaining historic buildings, and**
- **working to insure that the potential reuses are compatible with the surrounding recreational park uses.**

4. The boundaries of both the National Register site and National Historic Landmark designation should be redefined to:

- **take into account all the changes that have occurred *since their initial* designation,**
- **include more recently designated National Register eligible buildings, and**
- **account for archaeological data related to the site.**

The federally designated boundaries were defined in 1969 and 1978 respectively and are not only out of date, but often established as ones of convenience (e.g. the 800' contour line for the NHL boundary) rather than in relationship to relevant historic components.

The assignment of this National Register property to the "Initial Contact Period-Initial U.S. Presence" historic context either needs to be redefined or additional contexts need to be added to the significance of the site. Many of the structures date to after the turn of the 20th century and as such do not have their significance in that context.

The MnDNR should work closely with the Minnesota Historical Society and the National Park Service in redefining the boundaries of the Fort Snelling historic districts.

*Building and Site
Reuse
Recommendations*

The Team recommends that the site and buildings be reused with the mix of uses as follows:

- **Rehab Building #53 – Gymnasium – providing for either indoor recreational uses, housing in the form of weekly studios (rentals), or a hotel**
- **Rehab Building #54 – Medical Detachment Barracks – for Charter School classrooms**
- **Rehab Building #55 – Post Hospital – to dorm-type housing, for an Urban Environmental Learning Center, Americorps, or Residential Academy**
- **Rehab Building #57 – the Band Barracks – to its former use (used by Charter Schools etc.)**
- **Rehab Building #62 – Dead House – to offices or interpretive facility (excellent views of the Minnesota River Valley)**

- **Convert Building #63 – Quartermaster Shops – to a picnic shelter**
Because of its unsafe condition, fence off building No. 63 and retain as an historic artifact.
- **Rehab Building #64 – Fire Station – to compliment the fire museum proposed adjacent to the study area**
- **Rehab Building #65 – Post Guard House – as a food concession and welcome center**
- **Rehab Building #67 – Post Headquarters – as the Upper Bluff headquarters and administrative offices**
See Appendix E for concept design drawings.
- **Rehab Building #76 – Civilian Employees Quarters – for overnight stays or offices**
- **Rehab Building #101 – Barracks – as a military museum, Civil War through modern**
- **Rehab Building #102 – Barracks – as a conference and training center with housing across Taylor Avenue at Officer's Row (Buildings #152-#161)**
- **Rehab Building #103 – Barracks – as an Historic Preservation Technology Center and arts center and jobs training center**
- **Rehab Building #112 – the Bakery – to once again provide baked goods**
- **Rehab Building #151 – the Bachelor Officer's Quarters – to serve as the club house, pro-shop and food concession, with 2nd floor offices or housing, *or as a conference center.***
See Appendix F for concept design drawings.
- **Rehab Officer's Row – Buildings #152 – #161– for overnight stays including one or two Bed and Breakfast Inns**
- **Reconfigure the polo grounds to allow for more athletic fields, while retaining flexibility or special events**
Work completed by Minneapolis Park & Recreation Board.
- **Retain nine-hole golf course with minor changes to improve play**
- **Replant Taylor Avenue and Minnehaha Avenue with appropriate street trees**
- **Provide landscaped noise barrier along the airport fence**
- **Explore the trail connections between the Upper Bluff, the Old Fort, and the trails along the Minnesota and Mississippi Rivers**

Study Introduction

Study Concept

The Minnesota Reuse Consultation Team is a technical assistance program styled after the Preservation Advisory Services Team (PAST) program of the Midwest Regional Office of the National Trust for Historic Preservation. In November of 1986 the PAST Team began a study of the National Register-listed Johnston Hall in Faribault. This 1888 seminary building was vacant and threatened with imminent demolition. Today, Johnston Hall is successfully serving as a renovated medical office building as recommended in the PAST report.

The Minnesota Team concept was developed to provide preservation consultation to communities within the state needing professional help in determining the feasibility of reuse for their threatened historic buildings. The composition of the team varies, based on the constraints and opportunities presented by the property, but the core team is usually made up of a principal investigator, a preservation architect, a real estate development specialist, reuse-related professionals, and a representative of the MHS State Historic Preservation Office.

Since the Minnesota Team's inception, the consultation study concept has been applied to a variety of building types including:

- **the Sherburne County Courthouse, Elk River (1988);**
- **the Tettegouche Camp, Silver Bay (1989);**
- **the Joyce Estate near Grand Rapids (1989);**
- **the Old Main at the University of Minnesota-Duluth (1989);**
- **the WCCO Elevator Houses No. 2 & No. 3, Minneapolis (1989);**
- **the West Wing of the Gillette Children's Hospital, Saint Paul (1989);**
- **the George Washington Armstrong House in Saint Paul (1990);**
- **the Mannheimer-Goodkind House, Saint Paul (1990);**
- **the Thorstein Veblen Farmstead in Rice County (1990);**
- **the Minneapolis Armory (1990);**
- **the Gideon H. Pond House and Farm site, Bloomington (1992);**
- **the Calvary Barracks, Buildings 17- & 18, Fort Snelling (1993);**
- **the Scottish Rite Temple, Minneapolis (1994);**
- **the Stillwater Territorial Prison Site, Stillwater (1994);**
- **the Hoarding and Johnson School buildings in Aurora (1996);**

- the Kasota Village Hall in Kasota (1997);
- the Saint James Opera House in Saint James, Minnesota (1997); and
- Central High School in Red Wing (1998)
- *Multiple others since 1998*

Study Purpose

The Upper Bluff Area of Fort Snelling State Park is one of Minnesota's most historic and culturally important sites. This study was designed to help the MnDNR determine the feasibility of reuse for the 28 historic buildings and the surrounding 141 acres.

Through discussions held by the MnDNR and representatives of the Minnesota Historical Society, it was decided that the best way to approach the future disposition of the underutilized buildings was to conduct an adaptive reuse study. Through funding made available through the Legislative Commission on Minnesota Resources the MnDNR then decided to conduct the study, help form a consultation team, and provide support services in the completion of the reuse study.

In 2006, through Federal Base Relocation and Closure (BRAC) funding, Hennepin County was able to initiate the study to update the conditions assessment for both the interior and exterior of 28 buildings in the areas known as Area J and Officer's Row, and to provide updated cost analysis and provide concept designs for two buildings, the Post Headquarters No. 67 and the Bachelor Officers Quarters No. 151. See appendices E and F.

Consultation Team

The Fort Snelling State Park • Upper Bluff • Reuse Study Team assembled for this study was made up of:

Phyllis Hanson
Planner Metropolitan Council
 Mears Park Centre
 230 East 5th Street
 Saint Paul, Minnesota 55101

Recreational

Ms. Hanson, a licensed landscape architect, brings professional experience in park and land use planning. Ms. Hanson's experience comes from over 10 years in the private sector as a park and land use planning consultant, and 7 years as a planner/landscape architect with the Metropolitan Council.

John Kuester
Planner J.L.Kuester Community Development Services
 19834 York Street NW
 Elk River, Minnesota 55330

Tourism

Mr. Kuester served as an Advisor to the National Trust for Historic Preservation and has participated on past reuse studies, bringing his community development/tourism planning skills into the analysis for reuse. He served on the reuse teams for Embarrass, Elk River and Aurora and worked as a consultant to the Iron Range Resources and Rehabilitation Board (IRRRB) to develop a feasibility plan for heritage tourism in northeastern Minnesota.

Chuck Liddy

Preservation Architect

Miller •Dunwiddie•Associates, Inc.
123 North Third Street, Suite 104
Minneapolis, Minnesota 55401

Mr. Liddy is a registered architect in Minnesota and other states, and a Vice-President with Miller • Dunwiddie • Associates. Mr. Liddy served as the Preservation Architect on reuse studies for the George Washington Armstrong House in Saint Paul, the Minneapolis Armory, the Cavalry Barracks at Historic Fort Snelling, the Minneapolis Scottish Rite Temple, and the Stillwater Territorial Prison. Mr. Liddy recently completed a nine year term on the State Review Board of the State Historic Preservation Office, and was previously Chair of the Minneapolis Heritage Preservation Commission.

John Mannillo

Economic Specialist

Suite 550 Gilbert Building
413 Wacouta Street
Saint Paul, Minnesota 55101

Mr. Mannillo is a licensed Minnesota Real Estate Broker, and Real Property Administrator who was the developer and owner of the Pioneer Building, the Endicott Buildings, and the Gilbert Building in Saint Paul's Historic Lowertown District. Mr. Mannillo served as economic consultant in the reuse studies of Johnston Hall in Faribault, the Sherburne County Courthouse in Elk River, the Old Main building on the University of Minnesota-Duluth campus, the Gillette Children's Hospital, the Minneapolis Armory, and the George Washington Armstrong House in Saint Paul.

Lee Markell**Park Planner**

Minnesota Department of Natural Resources
Box 39
500 Lafayette Rd.
Saint Paul, Minnesota 55155

Mr. Markell is a licensed landscape architect with 25 years experience in various aspects of landscape architecture including site planning and design, historic landscape preservation, landscape restoration, and project management. He has worked for the MnDNR for the past 18 years as a landscape architect, land protection specialist, and park planner. He has served on the Eagan Advisory Park Commission since 1990, chairing the Commission since 1995.

Charles Nelson**Historical Architect**

State Historic Preservation Office
Minnesota Historical Society 345
Kellogg Boulevard West Saint
Paul, Minnesota 55102

Mr. Nelson serves as the Historical Architect for the State Historic Preservation Office. He is responsible for reviewing all restoration proposals for National Register properties throughout the State and administers the Secretary of the Interior's Standards for Historic Preservation projects. He also administers the federal tax incentives program for rehabilitation of historic properties. Mr. Nelson supplies historical data and evaluates the feasibility of the proposed alternative reuses to maintain compliance with the Standards.

Bill Weir**Park Management Specialist**

Minnesota Department of Natural Resources
Regional Park Manager
1200 Warner Road
Saint Paul, Minnesota 55106

Mr. Weir serves as the Regional Park Manager for the Metro Area State Parks. As Park Manager, he supervises the maintenance, operations and development of the state parks in the 7 county metro area. Mr. Weir has

worked for the MnDNR since 1968, and has served the state as a Landscape Architect, Regional Park Manager, and Natural Resource Manager. He brought administrative expertise to the reuse study process.

Thomas R. Zahn

Principal Investigator

Thomas R. Zahn & Associates
University Club of Saint Paul 420
Summit Avenue Saint Paul,
Minnesota 55102

For twelve years Mr. Zahn served as an Urban Planner and then Preservation Planner for the City of Saint Paul. He is a Past-President of the Preservation Alliance of Minnesota and an Advisor to the National Alliance of Preservation Commissions. Mr. Zahn heads a preservation and design consulting office that provides a spectrum of preservation services in both the public and private sectors. He has served as Principal Investigator on the majority of the historic property reuse studies in Minnesota.

Study Process

Each member of the team was supplied with a Fort Snelling Upper Bluff information packet prior to the consultation. Each packet contained pertinent information about the site's location, condition, and historical significance. The packets also included regional and local information, newspaper clippings, and letters providing perspectives on the disposition of the property.

The reuse consultation began on November 19, 1997 when the team first convened to interview representatives of the National Park Service's Federal Lands to Park Program, and the Government Services Administration (GSA). The interviews provided insight into the governmental regulations and requirements of the present deed restrictions which stipulates that the land and buildings of the Upper Bluff can only be used for recreational purposes.

Currently Hennepin County and the MnDNR are discussing the possibility of transferring the designation of the Upper Bluff area from a Parks to Lands program to a Historic Monuments program. Under the Historic Monuments program, the buildings on the site could be leased for non-recreational uses.

On December 1, 1997, the team began the intensive, week-long, on-site interviews and consultation. The study began with a guided driving tour of the Upper Bluff area and the surrounding historic buildings. This was followed by a walking inspection of the interior of a few of the buildings. Following the tours and inspections, the team spent the afternoon in interview sessions at the Thomas Savage Visitor Center in the Fort Snelling State Park. That evening the team made a presentation of the

reuse process at the first of three scheduled public meetings. The presentation was made in the Fort Snelling History Center Auditorium.

The team spent the following four days interviewing a variety of individuals and representatives of organizations that have a relationship to the "Upper Bluff area, who could provide additional expertise to the analysis, or who were seen as potential tenants for future development of the site.

During the first week in December, the consultation team met with over 50 interviewees, representing the following organizations:

- the Veteran's Administration
- the National Park Service
- the Government Services Administration
- the United States Army Reserve
- the Legislative Commission on Minnesota Resources
- the Minnesota Department of Natural Resources
- the Minnesota Department of Tourism
- the Minnesota Historical Society
- the Preservation Alliance of Minnesota
- the Minnesota Recreation and Parks Association
- Hostelling International-Minnesota AYH
- the Metropolitan Airports Commission
- The Metropolitan Council
- the Ramsey County Rail Authority
- the Hennepin County Transit Authority
- the Minneapolis Parks and Recreation Board
- the Richfield Recreational Services
- the Saint Paul Parks Department
- the Fort Snelling State Park Association

In addition the team interviewed a variety of representatives of military and municipal museum interests, preservation, recreational, educational, and private development interests.

Following the five day on-site consultation, the team developed a list of issues/considerations that impact the reuse of the property and its 28 buildings. That meeting, and subsequent discussions among the team members, have produced a list of alternative uses, a team "vision" for the Upper Bluff site, recommendations, and a methodology to put this strategically located and nationally important cultural resource back into a productive reuse.

On February 26, 1998 a second public meeting was held to present the team's initial findings regarding the future potential of the Upper Bluff site and buildings. At that meeting the public was introduced to the "vision" for the site developed by the team. The evening also included a discussion of the various issues that impact the site's disposition, a presentation of the types of reuses that were being considered, and a question and answer period where the audience could express their concerns, recommendations, and dreams for the site.

Concurrent with the reuse consultation and under the direction of Robert Clouse, the Archaeology Department of the Minnesota Historical Society prepared a report titled "All That Remains-A Study of Historic Structures at Fort Snelling Minnesota." The report provides information and historical context for the remaining historic buildings, structures and features that are contributing elements to the Fort Snelling National Register site and Fort Snelling National Historic Landmark. Parts of that study have been woven into this report.

In addition, the firm of Angstrom Analytical, Inc. completed a "Limited Scope Environmental Survey Report" which included a preliminary hazardous materials assessment on the Upper Bluffs 28 historic structures.

The consulting firm of Arden Engineers made an assessment of the site infrastructure and provided a cost estimate for utility upgrades. Refer to the *Upper Bluff Building Analysis and Cost Estimate Spreadsheet*, pages 66-67 (77-78 and appendix C for new numbers), for details on abatement costs and utility upgrades.

In 2006, twenty-six of the twenty-eight buildings were entered and photographs were taken on each floor. The exterior of each building was also photographed. Along with photographs and notes, an Interior Condition Number and Exterior Condition Number was determined for each building. Building cost analysis numbers were updated for current building conditions and inflation.

Historic Background & Existing Conditions

Chronology of Events **The following is a listing of significant events, in chronological order, which help frame the significance of the site and have led to the commencement of the reuse study for the Fort Snelling State Park Upper Bluff.**

Date	Event
1804-1805	During their exploration of the Louisiana Territory, Meriwether Lewis and William Clark recommended the establishment of military fortifications at critical Missouri and Mississippi river junctures to maintain peace and protect trade with the American Indians. Among the sites recommended was St. Anthony's Falls.
1805, Sept.	Lieutenant Zebulon Pike negotiated a treaty with the Dakota tribe granting the US government 100,000 acres at the confluence of the Mississippi and St. Peters (Minnesota) Rivers.
1819, Aug.	The fort was constructed. The first commander, Lieutenant Colonel Henry Leavenworth, chose the low ground on the right bank of the mouth of the St. Peter's River as the site for a temporary quarters. The location soon proved to be unhealthy.
1820	Fearing spring floods and more disease, Leavenworth moved his troops to high grounds near a spring a mile up the west bank of the Mississippi River – this became Camp Coldwater. During the summer, Colonel Josiah Snelling became the new commander of the regiment. Under his energetic direction, a new stone fort was constructed atop the bluff on the west bank of the confluence of the St. Peters and Mississippi rivers. The new post was given the name Fort St. Anthony the following year.
1825	Construction of the new post was completed. The following year, in recognition of his considerable achievement, the War Department officially changed the name of the site to Fort Snelling.

- 1849 The Minnesota Territory was formed, with Saint Paul as its political center. As the western frontier became ever more remote, Fort Snelling became more of a tourist attraction than a military necessity.
- 1858 Fort Snelling and eight thousand surrounding acres were sold under dubious circumstances to Franklin Steele, a former sutler, for \$90,000. Following the sale, the fort was abandoned.
- 1861-1865 The outbreak of the Civil War and the U.S.-Dakota Conflict prompted the reactivation of the fort.
- 1866 The Army decided to retain the post for use as headquarters for the Department of the Dakotas.
- 1879 At the recommendation of General Alfred H. Terry, to provide better accommodations for the officers and men of the Department of the Dakotas, work began on 30 new buildings. Headquarters, officers quarters and support facilities were constructed.
- 1889 New brick infantry barracks were constructed.
- 1903-1907 New barracks, officers quarters, stables, warehouses, artillery sheds and workshops were constructed. The enlarged post was now at its fullest development.
- 1917-1918 As a site for the training of officers, over 2,500 junior officers graduate from the post. Late in 1918 most of the site was designated as US General Hospital Twenty-nine to treat convalescent wounded.
- 1918-1939 The fort became known as the 'Country Club of the Army.' A golf course, officers' club, streetcars to both cities, military shows and polo games, demonstrations by the trick horse 'Whisky,' and the largest game preserve of a US military installation make it a popular post for soldiers.
- 1938 The Work Progress Administration reconstructed portions of the post at a cost of \$500,000.
- 1940 The Selective Service Act led to the opening of a Recruiting and Induction Station and a Reception Center. Over 600,000 soldiers were processed here during the Second World War.

1944	A Military Intelligence Service Language School was established at the post. Over 6,000 linguists, mostly Nisei (Japanese-Americans) graduated.
1946	Fort Snelling was decommissioned following the end of World War II. The site was turned over to the Veteran's Administration.
1960	Fort Snelling, including the Upper Bluff was designated a National Landmark.
1961	Fort Snelling State Park was established.
1966, Oct.	Upper Bluff area was placed on the National Register of Historic Places.
1969, Oct.	Historic Fort Snelling and the Chapel were deeded to the State of Minnesota.
1971	The U.S. Department of the Interior conveyed 141 acres of surplus Federal property known as the Upper Bluff area to the MnDNR exclusively for public park and recreational purposes in perpetuity. The quitclaim deed included restrictions that require the property to be developed and used according to the Program of Utilization submitted by the MnDNR as part of its application to acquire the property. The MnDNR incorporated the Upper Bluff area into Fort Snelling State Park.
1976	The State designates the Mississippi River and its adjacent corridor within the metropolitan area a Critical Area.
1977, May	An Act for Fort Snelling Officer's Row was signed, authorizing commissioner of administration to lease/sell buildings and adjacent land.
1977, Sept.	A Request for Proposal was released to obtain a concessionaire for Officer's Row buildings in September.
1979	The 1971 Utilization Plan was amended to allow for a concession for the golf course and proposed rehabilitation of Officer's Row and J-Area. A concession agreement was signed with the Officer's Row Corporation to operate the golf course and Officer's Row.
	The Mississippi River Critical Area is permanently designated.

- 1988 Congress designates the Mississippi River and Recreational Area a unit of the national park system.
- 1991, Aug. Authority for continued military occupation of J-Area was extended for 4 years, then in 1995 for an additional 3 years.
- 1991, Sept. The Officer's Row Corporations concession agreement was terminated by the Executive Council. The MnDNR issued a Request for Proposal for a new concessionaire for the golf course and Officer's Row buildings.
- 1992 Minneapolis Park and Recreation Board became the concessionaire for the golf course and polo grounds.
- 1995 The Comprehensive Management Plan for the Mississippi National River and Recreation Area is approved.
- 1997 The Department of the Army vacated Area J.
- 1997, Nov. The reuse study for the Upper Bluff area formally began with the convening of a consultation team.
- 1998, Oct. The Fort Snelling State Parka Upper Bluff Reuse Study was completed and printed for distribution.
- 2006, Jan. Update study initiated by Hennepin County*
- 2006, May Upper Bluff placed on National Trust for Historic Places "11 Most Endangered" list*

Historic Overview

The Upper Bluff at Fort Snelling possesses historical significance as an intact and cohesive grouping of buildings directly associated with the growth and development of the military post at Fort Snelling - the fort beyond the walls. As the military post at Fort Snelling was given more responsibilities, it expanded outward along the Upper Bluff. Serving a succession of needs, the Upper Bluff reflected the changing roles of the military and the nation it served, both in times of peace and in war.

Fort Snelling originated at the suggestion of Meriwether Lewis and William Clark during their exploration into the Louisiana Territory. They recommended in 1805 the establishment of a fort near St. Anthony's Falls to protect trade and maintain peace along the northwestern frontier. The same year, Lieutenant Zebulon M. Pike, on behalf of the United States, negotiated a treaty with the local Dakota (Sioux) Indians for tracts of land within their territory upon which to construct a U.S. military post. The land Pike acquired included the area around St. Anthony Falls, the confluence of the Mississippi and St. Peters (Minnesota) Rivers, and extended as far as the mouth of the St. Croix River. An expedition was sent into the upper Mississippi region in 1817 to review the land purchased by Pike. It was not until 1819 that a small contingent of U.S. soldiers, under the command of Lieutenant Colonel Henry Leavenworth, were sent to the area to build a fort. Colonel Josiah Snelling became the new commanding officer in 1820. It was Snelling who selected the site for the fort and decided on the design and the materials. An Indian Agency building was located near the post as well. The original name of Fort St. Anthony was changed in 1826 to Fort Snelling in honor of the commanding officer.

The fort's original mission of safeguarding trade and security gradually lost importance as the "frontier" moved ever further west, especially after Minnesota became a territory in 1849. The fort and surrounding military reservation were sold to Franklin Steele for \$90,000 under dubious circumstances in 1858. Shortly thereafter the American Civil War broke out, and Fort Snelling was reoccupied by the military and declared the location of the draft rendezvous and training facility for volunteers. The Dakota War that also arose placed additional duties in the care of the military post. A number of wooden structures were built along the Minnesota River bluffs towards the southwest to house functions necessary to fulfill its new duties, including barracks, officers quarters, kitchens and mess halls, a blacksmith's shop, a carpenter's shop, numerous stables, and other facilities. None of these remain standing today.

There is little evidence of growth in the garrison immediately after the end of the Civil War, with the exception of the construction of a new hospital in 1874, located where the north end of the Mendota Bridge now rests. Four years later, the Department of the Dakotas headquarters were moved from Saint Paul to Fort Snelling, initiating a new period of growth. Following the geographic pattern established during and after the Civil War, new

construction spread out in the contiguous areas available along the Upper Bluff. The early development of the Officer's Row (Buildings #154, #156, #158, and #160) on Taylor Avenue, the headquarters building (Building #67) built in 1879, the 1880 ordnance depot (Building #22, outside the study area), and new barracks completed in 1885 (Buildings #101-103), are all related to the post's enhanced administrative role. The Upper Bluff area of the military post became the new focus of activity, while the original stone Fort Snelling was relegated to the status of ordnance depot. The growth at the military post slowed when the Department of the Dakota headquarters returned to Saint Paul in 1886, but between 1878 and the early 1890s more than 30 buildings had been added to the military post.

The placement of the new Officer's Row and barracks buildings reinforced the rank and social distinctions found in military life. The physical separation between officers and enlisted personnel was further demarcated by the construction of a road, sidewalks, landscaping, and a greater 'set-back' for the Officers' Quarters. By the mid-1880s, a structured streetscape had emerged along the Upper Bluff.

A movement towards the consolidation of many small forts into fewer and larger military posts began in the late nineteenth century, especially following the Spanish American War in 1898. As the United States became a world power, it was felt necessary to assemble greater numbers of soldiers in one place so that they could train together in larger formations. The military post at Fort Snelling reflected this change of reasoning by another period of rapid growth. A new hospital (Building #55) was constructed in 1898, along with a gymnasium (Building #53), in 1903. The latter is one of only two red brick buildings remaining on Taylor Avenue. Additional barracks for cavalry (Buildings #17 and #18) (outside the study area) and artillery (now gone), and a number of support facilities for housing animals (Buildings #30 and #209), artillery gun sheds (Buildings #202 and #207) (outside the study area), and artillery work shops (Buildings #205 and #206) (outside the study area) were constructed during this period as well. Altogether 18 structures remain from the turn of the century expansion.

The Fort Snelling military post was used to train National Guard and regular army soldiers in 1916 in preparation for the war in Europe, although it wasn't until the spring of 1917 that the United States entered the war against Germany and her allies. At Fort Snelling, over 150 structures were constructed – dedicated to housing, mess and training – including extensive trench warfare training grounds. None of these facilities or structures survive today. The military post specialized in officer training, eventually graduating 2,500 junior officers. Late in 1918 most of the site was designated as US General Hospital Twenty-nine to treat convalescent wounded.

The artillery drill fields of the late nineteenth century were converted to other uses in the 1920s. By 1927, the area was used as a recreation field with a polo field, a polo practice field, a running track, and baseball diamonds. In 1928 an officers club (Building #395) (outside the study area) was constructed overlooking the Minnesota River. In addition, the base had a game preserve. A 9-hole golf course was also added, although the date of construction is unknown. Due to the construction of Trunk Highway 5 in the late 1950s and later airport expansion, the majority of the old course was destroyed. The current nine-hole course does not share any of the "holes" from the earlier golf course. By 1938 softball diamonds, pool and hockey arena, tennis courts, and lighting for the athletic field were added. Fort Snelling became known as "The Country Club of the Army."

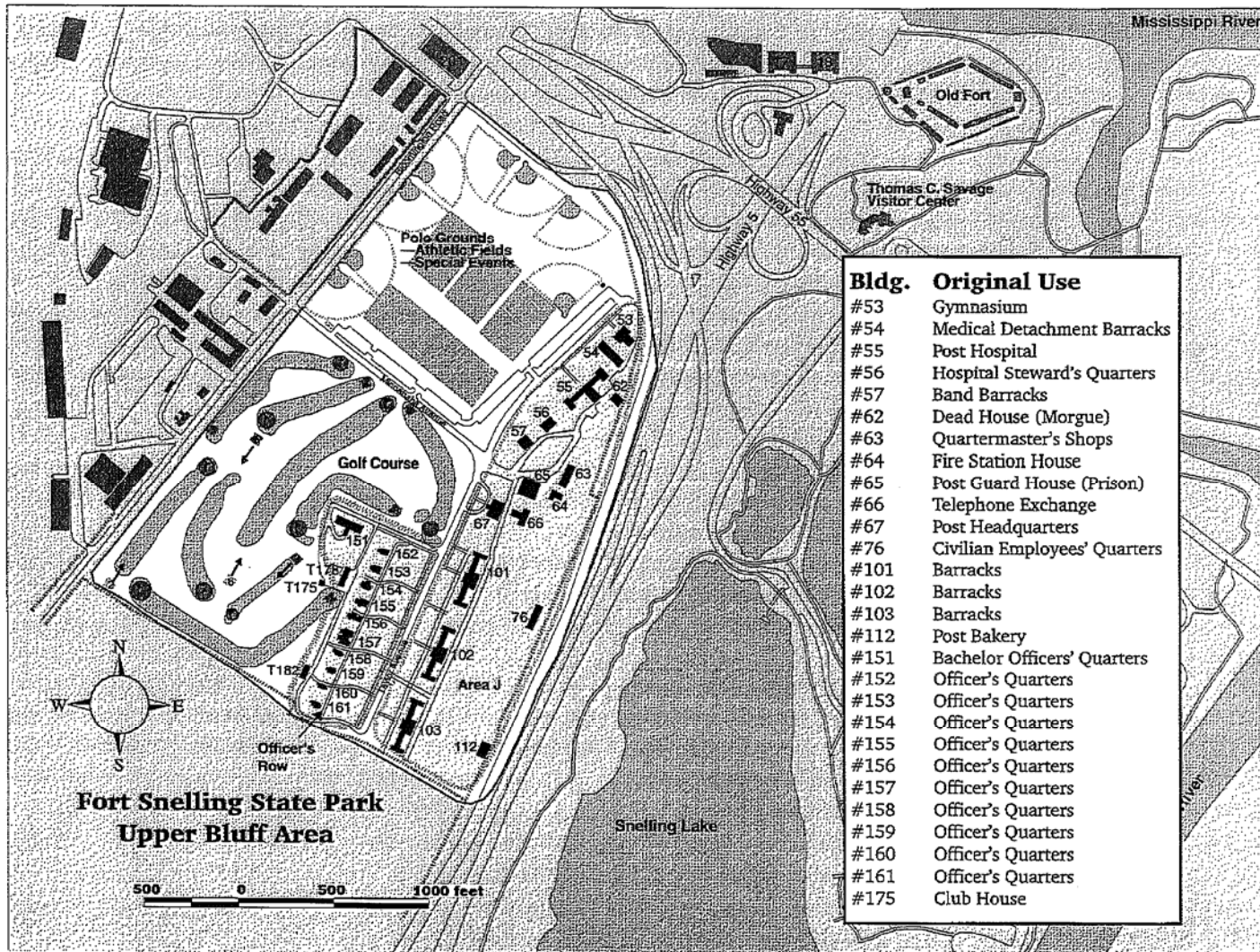
The Great Depression in 1929 almost led to the closure of Fort Snelling for a second time. During the early 1930s Fort Snelling became the location of a Supply Company of the Minnesota District CCC (Civilian Conservation Corps), changing to a Headquarters Company in 1934. Along with the WPA (Work Progress Administration), the CCC presence at the military post led to lasting modification to the grounds and buildings throughout the fort, such as re-roofing, construction of garages, pouring cement floors in existing buildings, lining drainage ditches with stonework to reduce erosion, and even raising the surface level of the drill fields about one foot, using only wheelbarrows of dirt. The total cost of these modifications amounted to \$500,000. Building #223 (outside the study area) was constructed in 1935 as a commissary warehouse for the CCC unit at Fort Snelling.

Another conflict with Germany, and Japan, was seen as likely by the late 1930s. A barracks for the medical detachment (Building #54) was constructed in 1939. The following year the Selective Service Act led to the opening of a Recruiting and Induction Station and a Reception Center. After the entry of the United States in W.W.II in December, 1941, the military post at Fort Snelling swelled in size to over 300 buildings. Most of these structures no longer survive. Over 600,000 soldiers were processed here during the Second World War. Specialized units such as military police, railroad, and a Military Intelligence Service Language School received training at the military post as well.

The active role of Fort Snelling as a military post ended in October, 1946, when the federal government closed the base and turned it over to the Veterans Administration. The area gradually was passed to various agencies of the state of Minnesota, beginning in 1961 with the establishment of Fort Snelling State Park. Proposals to develop the Upper Bluff without disturbing its historic value began in the 1970s, although various issues have caused these plans to be postponed.

Architecture

There are 28 extant buildings in the Upper Bluff study area that are considered historically significant or important to its recreational uses. The following lists these buildings by name and building numbers and gives a brief history of each.



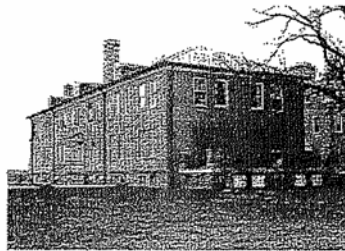


Gymnasium: Building #53

Date of Construction: 1903

Foundation: stone Walls: brick Roof: slate

Built from the first congressional funds dedicated for the construction of gymnasiums and canteens, it served as a center for indoor recreation for troops. On a 1904 plan it is listed as the post exchange. It was remodeled during WWII to include a ballroom on the second floor, a billiard room and lounge on the first floor, and bowling alleys and post exchange in the basement. This two story red brick structure is accented with keystones, a main entry surround and water table course of gray limestone. It is one of only two red brick buildings remaining along Taylor Avenue. The exterior of the structure is one of the least altered of the remaining Fort buildings.



Medical Detachment Barracks: Building #54

Date of Construction: 1939

Foundation: stone Walls: brick Roof: slate

The Medical Detachment Barracks is one of the most recent buildings that remains at Fort Snelling. This two-story, yellow brick building was constructed next to the hospital to provide housing for the approximately 75 men assigned to hospital duty. The structure is identified as a hospital annex in an undated United States Army document. The hipped roof contains three gabled roof dormers on the front and back. Unlike other buildings along Taylor Avenue, its facade fronts southwest towards the hospital rather than towards the street.



Post Hospital: Building #55

Date of Construction: 1898

Foundation: stone Walls: brick Roof: slate

The hospital was one of eight to be built from dedicated congressional funds that year. It replaced an earlier hospital that sat at what is now the southwest end of the Mendota Bridge. Designated as U.S. Hospital No. 29, it received additions in 1905, 1910, and 1935 to provide expanded care facilities. The structure contained isolation wards, surgery facilities, a kitchen, dental facilities, and a dispensary along with hospital ward rooms that held 150 beds. The two-story wooden porches that extended along the front of the building, and the one story porch that was on the central projecting bay have been removed. The yellow brick, two-story construction had a hipped roof with double hipped roof dormer, while the wings had two double dormers. Wings added at right angles to the original wings provide a gable end to the facade of the building.



Hospital Steward's Quarters: Building #56

Date of Construction: 1900

Foundation: stone Walls: brick Roof: slate *Asphalt Shingles*

This two-story, red brick, Colonial Revival building next to the hospital was initially constructed to house the hospital's principal non-commissioned officer, the chief steward and his family. The structure has a hipped roof with one chimney on the south roof slope. The original full-width wooden porch has since been replaced by a brick one with a rusticated concrete block foundation. The asymmetrically placed front door is common on the Colonial Revival structures building around the turn of the century. The windows have segmental – arch lintels and have a 6/6 pattern of glazing. There is a small, single story addition off the eastern rear corner of the house.



Band Barracks: Building #57

Date of Construction: 1903

Foundation: stone Walls: brick Roof: slate *Asphalt Shingles*

This two and one-half story yellow brick Colonial Revival building with a three story central projecting bay was initially designed as housing for the military band. It was built near the fort flagstaff and central administration building since the band played for guard mounts, retreats and other scheduled ceremonies. During the early 1920s it served as an isolation hospital. It has a two story porch on either side of the projecting bay with round columns supporting the roof. The lower portion of each of the porches has been closed in. The gables on either end of the building contain Palladian windows. The windows and doors have segmental arch lintels.



Dead House: Building #62

Date of Construction: 1904

Foundation: stone Walls: brick Roof: slate

This single story yellow brick building was originally constructed as the morgue (dead house). It is thought that this structure served as storage for corpses during those months when the ground was too frozen to allow internment. In 1933 it was essentially doubled in size and converted to living quarters.



Quartermaster Shops: Building #63

Date of Construction: 1879-80

Foundation: stone Walls: brick Roof: shingle

Building #63 has served a number of functions throughout its existence. It was initially constructed as quartermaster shops when the Department of the Dakotas headquarters moved to Fort Snelling and resulted in new construction in this area of the fort. In the latter part of the nineteenth century it served as the post exchange. In the 1930s it was converted to eight sets of married non-commissioned officers' quarters. This two story yellow brick building is in very poor condition with gaping holes in the roof. Brick work on the walls does not use common bond construction, using instead metal ties between the withes. These have rusted through and the outer withe of brick has collapsed in a section of the east wall.



Fire Station House: Building #64

Date of Construction: 1903

Foundation: stone Walls: brick Roof: slate

This brick structure was built to house two fire engines. The tower at the rear of the structure may have housed a fire siren of some sort. At some point prior to 1933, a second story was added with living quarters for fire personnel. A single story addition was constructed on the south side of the building in 1933.



Post Guard House: Building #65

Date of Construction: 1891

Foundation: stone Walls: brick Roof: cortright tile

The post guard house was initially constructed as a one story brick building to hold the daily guard as well as prisoners. In 1908 a brick addition was built on the south side, increasing the capacity to 65 prisoners. A second brick addition was made in 1912 to house a dining room and kitchen. After the Fort closed in 1946, the structure was used by the Veterans Administration Fire Department until the 1980s. This building has a full width porch on the west side.

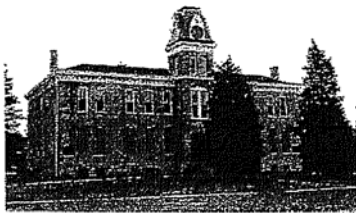


Telephone Exchange: Building #66

Date of Construction: 1927

Foundation: cement Walls: brick Roof: asphalt shingles

Originally constructed as a wooden structure, this building was replaced as a one story red brick building serving the communication needs of the Fort. The building was added to in 1939 to house troops assigned to this facility. It also housed a photography laboratory and a film library.



Administration Building: Building #67

Date of Construction: 1879-80

Foundation: stone Walls: brick Roof: tin

Building #67 was originally constructed as the administration building of the Department of the Dakotas headquarters when it was moved from Saint Paul to Fort Snelling in 1879. The Department of the Dakotas headquarters returned to Saint Paul in 1886. After that point Building #67 was used as the post headquarters until the Fort closed in 1946. A fire occurred in the building in 1916. The clock tower was added in 1883. This two story yellow brick structure was a central focal point of the line of buildings along Taylor Avenue.



Civilian Employees' Quarters: Building #76

Date of Construction: 1879-80

Foundation: stone Walls: brick Roof: shingle *Cement Fiber Tile*

This red brick one story structure was originally built to house six civilian employees. It was remodeled in 1912 to house four non-commissioned officers' families. In 1933, two porches were added.



Barracks: Building #101

Date of Construction: 1885

Foundation: stone Walls: brick Roof: cotright tile

This building is one of what was a row of four identical infantry barracks. The fourth structure was demolished as a result of airport expansion. Construction of the barracks was part of a post expansion, begun in 1879 for the Department of the Dakotas headquarters and the military's efforts as consolidation. The structure is two and one-half stories, constructed of yellow brick. The body has a gable roof with a dormer on each side. The center pavilion has a mansard roof with two dormers. The pavilion contains separate entrances for each side of the building. The wings have hipped roofs with three dormers each. All the dormers on the structure have hipped roofs. In the rear, a single story building has been connected to the structure. The façade once held a single story shed roofed verandah that has been removed. A two-story rear porch was also removed.



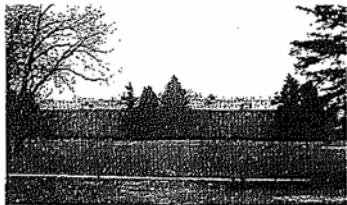
In 1936, the Work Project Administration (WPA) made two 2-story additions to the back of each of the wings to house an additional 53 men in each addition. These additions have concrete foundations.

Barracks: Building #102

Date of Construction: 1885

Foundation: stone Walls: brick Roof: cotright tile

Same description as Building #101



Barracks: Building #103

Date of Construction: 1885

Foundation: stone Walls: brick Roof: cotright tile

Same description as Building #101



Post Bakery: Building #112

Date of Construction: 1891

Foundation: stone Walls: brick Roof: shingles

This single story building is constructed out of yellow brick. The hipped roof was originally metal, was replaced by slate in 1907-08, and is now shingle. The roof has a small gable over the front door. The window and door openings originally has flat-arch lintels of brick, but are now segmental arch lintels. Some window openings have been filled in with brick. Between 1910 and 1937, a "cantonment building [was] attached as [quarters] for married men." It had a sitting room, kitchen, two bedrooms, and a hall. Perhaps this housed the baker and his family. Baking equipment was still being installed in the 1930s, so it can be assumed that it was still operating as the post bakery at that time. At an unknown date, the chimney on the north side of the building was removed. In 1936, the smokestack visible in the current photo was installed, the remaining chimney and roof vent visible in historic photos were probably removed at that time.



Bachelor Officers' Quarters: Building

#151 Date of Construction: 1904

Foundation: stone Walls: brick Roof: slate

This red brick Colonial Revival building has a hipped roof with a gable roofed bay projecting out from the center of the facade. The bay is supported by four columns on the first story. The structure originally had two 2-story wood porches with flat roofs on either side of the central bay. The main entrance to the building is located under the second story bay. The windows of the structure have flat-arch lintels and sills made of stone. In 1929, two 12'-x12' 6", two-story additions were made to each side of the back to house a total of four kitchens for these living quarters. It had a cement block foundation, brick walls, and a tin roof. Sometime after 1929, brick additions were made to either side of the facade and the wood porches were replaced in brick. In 1936, a concrete addition was made to install a new boiler. This building also served as the Officers' Country Club in the 1920s.



Officer's Quarters: Building

#152 Date of Construction: 1879-80

Foundation: stone Walls: brick Roof: shingle

When Officers' Row was constructed, this was one of five houses built to this particular plan. However, this is the only remaining example of that plan at Fort Snelling. It is of the Queen Anne style and has a cross-hipped roof. As was common in the Queen Anne style, the roof also has lower cross gables on the north, south, and east sides, which have a decorative cornice. The single story full width wood porch is decorated with modest spindlework. However, the original porch was replaced by a smaller brick porch. There is a bay window on the south side of house. A decorative balustrade sits on the roof of the porch outside a pair of windows on the facade. A pair of windows have a hipped pent roof on the north side of the building. Its asymmetrical plan is typical of the Queen Anne style of architecture, which aimed to avoid flat-walled surfaces.

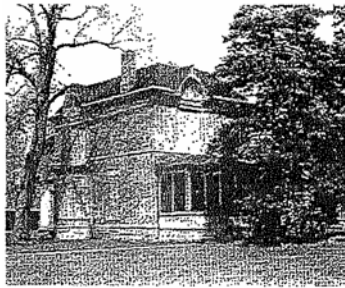


Officer's Quarters: Building #153

Date of Construction: 1892

Foundation: stone Walls: brick Roof: shingle

When Officers' Row was constructed, this was one of seven houses built to this particular plan. Currently, four houses of that plan remain at Fort Snelling. This yellow brick house is of the Queen Anne style with a cross hipped roof with hipped dormers on east and south sides and eyebrow dormer on north side. A single-story full-width decorated wood porch existed on the facade. This was later replaced by a smaller brick porch. A single-story bay projects from the house on the south side. The windows have stone lintels and sills. The structure originally had patterned-masonry chimneys on the roof slope, but these were replaced by simpler chimneys. Its asymmetrical plan is typical of the Queen Anne style of architecture, which aimed to avoid flat-walled surfaces. This particular style of Queen Anne is starting to show Colonial Revival influences.



Officer's Quarters: Building #154

Date of Construction: 1879-80

Foundation: stone Walls: brick Roof: shingle

This yellow brick house is of the Queen Anne style with some characteristics of the Second Empire Style, such as the mansard-like deck-on-hip roof and brackets below the eaves. As was common in the Queen Anne style, the roof also has lower cross gables. These gables have decorated bargeboards. The gable on the facade originally had a finial. A single-story full-width decorated wood porch existed on the facade. This was later replaced by a smaller brick porch. Single-story bays projected from the house on the north and south sides. The bay on the north side of the house was topped with a decorative balustrade. A decorative band of stone breaks the first from the second stories on the exterior of the house. The structure originally had a patterned-masonry chimney on the roof slope, but this was replaced by a simpler chimney. Its asymmetrical plan is typical of the Queen Anne style of architecture, which aimed to avoid flat walled surfaces.



Officer's Quarters: Building #155

Date of Construction: 1892

Foundation: stone Walls: brick Roof: shingle

When Officers' Row was constructed, this was one of seven houses built to this particular plan. Currently, four houses of that plan remain at Fort Snelling. This yellow brick house is of the Queen Anne style with a cross hipped roof with hipped dormers on east and south sides and eyebrow dormer on north side. A single-story full-width decorated wood porch existed on the facade. This was later replaced by a smaller brick porch. A single-story bay projects from the house on the south side. The windows have stone lintels and sills. The structure originally had patterned-masonry chimneys on the roof slope, but these were replaced by simpler chimneys. Its asymmetrical plan is typical of the Queen Anne style of architecture, which aimed to avoid flat-walled surfaces. This particular style of Queen Anne is starting to show Colonial Revival influences.



Officer's Quarters: Building #156

Date of Construction: 1879-80

Foundation: stone Walls: brick Roof: shingle

This yellow brick house is of the Queen Anne style with some characteristics of the Second Empire Style, such as the mansard-like deck-on-hip roof and brackets below the eaves. As was common in the Queen Anne style, the roof also has lower cross gables. These gables have decorated bargeboards. The gable on the facade originally had a finial. A single-story full-width decorated wood porch existed on the facade. This was later replaced by a smaller brick porch. Single-story bays projected from the house on the north and south sides. The bay on the north side of the house was topped with a decorative balustrade. A decorative band of stone breaks the first from the second stories on the exterior of the house. The structure originally had a patterned-masonry chimney on the roof slope, but this was replaced by a simpler chimney. Its asymmetrical plan is typical of the Queen Anne style of architecture, which aimed to avoid flat-walled surfaces. Unlike the other houses of this style, this house has had a two-story hipped roof addition made on the southwest corner of the back.



Officer's Quarters, Double Set: Building #157

Date of Construction: 1905

Foundation: stone Walls: brick Roof: slate

This two and one-half story yellow brick duplex has a cross gable roof with cornice returns. The roof was originally covered in slate but now has shingles. The plan is U-shaped, with a symmetrical facade and two wings behind. Most of the windows have segmented-arch brick lintels and were once flanked by a pair of shutters. A pair of arched windows fill the front gable and there are Palladian windows in each side gable. A denticular cornice runs beneath the gables. One story porches wrap around the front corners and have Colonial Revival columns. The porches once also had a denticular cornice. The wrap-around porches are unusual for the Colonial Revival style and may be a holdover from the Queen Anne style. The picture above seems to show a back porch on the structure as well.



Field Officer's Quarters: Building #158

Date of Construction: 1879-80

Foundation: stone Walls: brick Roof: shingle

This yellow brick house is of the Queen Anne style with some characteristics of the Second Empire Style, such as the mansard-like deck-on-hip roof and brackets below the eaves. As was common in the Queen Anne style, the roof also has lower cross gables. These gables have decorated bargeboards. The gable on the facade originally had a finial. A single-story full-width decorated wood porch existed on the facade. This was later replaced by a smaller brick porch. Single-story bays projected from the house on the north and south sides. The bay on the north side of the house was topped with a decorative balustrade. A decorative band of stone breaks the first from the second stories on the exterior of the house. The structure originally had a patterned-masonry chimney on the roof slope, but this was replaced by a simpler chimney. Its asymmetrical plan is typical of the Queen Anne style of architecture, which aimed to avoid flat walled surfaces.



Officer's Quarters: Building #159

Date of Construction: 1892

Foundation: stone Walls: brick Roof: shingle

When Officers' Row was constructed, this was one of seven houses built to this particular plan. Currently, four houses of that plan remain at Fort Snelling. This yellow brick house is of the Queen Anne style with a cross hipped roof with hipped dormers on east and south sides and eyebrow dormer on north side. A single-story full-width decorated wood porch existed on the facade. This was later replaced by a smaller brick porch. A single-story bay projects from the house on the south side. The windows have stone lintels and sills. The structure originally had patterned-masonry chimneys on the roof slope, but these were replaced by simpler chimneys. Its asymmetrical plan is typical of the Queen Anne style of architecture, which aimed to avoid flat-walled surfaces. This particular style of Queen Anne is starting to show Colonial Revival influences.



Officer's Quarters: Building #160

Date of Construction: 1879-80

Foundation: stone Walls: brick Roof: shingle

This yellow brick house is of the Queen Anne style with some characteristics of the Second Empire Style, such as the mansard-like deck-on-hip roof and brackets below the eaves. As was common in the Queen Anne style, the roof also has lower cross gables. These gables have decorated bargeboards. The gable on the facade originally had a finial. A single-story full-width decorated wood porch existed on the facade. This was later replaced by a smaller brick porch. Single-story bays projected from the house on the north and south sides. The bay on the north side of the house was topped with a decorative balustrade. A decorative band of stone breaks the first from the second stories on the exterior of the house. The structure originally had a patterned-masonry chimney on the roof slope, but this was replaced by a simpler chimney. Its asymmetrical plan is typical of the Queen Anne style of architecture, which aimed to avoid flat-walled surfaces.

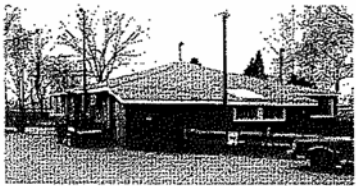


Officer's Quarters: Building #161

Date of Construction: 1892

Foundation: stone Walls: brick Roof: shingle

When Officers' Row was constructed, this was one of seven houses built to this particular plan. Currently, four houses of that plan remain at Fort Snelling. This yellow brick house is of the Queen Anne style with a cross hipped roof with hipped dormers on east and south sides and eyebrow dormer on north side. A single-story full-width decorated wood porch existed on the facade. This was later replaced by a smaller brick porch. A single-story bay projects from the house on the south side. The windows have stone lintels and sills. The structure originally had patterned-masonry chimneys on the roof slope, but these were replaced by simpler chimneys. Its asymmetrical plan is typical of the Queen Anne style of architecture, which aimed to avoid flat-walled surfaces. This particular style of Queen Anne is starting to show Colonial Revival influences.



Golf Course Clubhouse: Building #175

Date of Construction: 1940

The original function of this single story frame building is unknown. It is currently used as the club house for the adjacent golf course. The structure has a low-pitched pyramidal roof covered with shingles. It has a shed-roofed addition on the north side of the building. It is covered in wood siding.

This building was not part of the 2006 study update.

See attachments in appendix A: Photo contact sheets
 See attachments in appendix B: 27 field reports (1 for each building assessed)
 See attachments in appendix C: Structural Analysis

Architectural

Context:

Over the years, the buildings of the Upper Bluff at Fort Snelling have been divided into two groups for reference purposes Officer's Row and Area J. Although there are overall similarities among many of the buildings throughout both areas, there are also major distinctions, as outlined below.

Area J

Area J is comprised at the north end of administrative and other buildings used to support the functions of the fort. At the south end, across Taylor Avenue from Officer's Row, are three remaining enlisted men's barracks buildings. Area J buildings were constructed between 1879 to 1939, with the large majority built in the late 19th and early 20th centuries. All appear to have solid masonry exterior bearing walls. Given their wide range of uses, the limited amount of time that the evaluation team was able to be in them, and the fact that drawings were available for only a small portion of them, it was difficult to assess the structural system for each. Smaller buildings generally appear to be solid masonry load bearing exterior walls with wood frame partitions, floors, and roofs; while the larger buildings appear to employ interior structures of either steel or concrete columns and beams. There are additions to the rear of many of the structures that have wood siding.

The exteriors of Buildings #53, #56, #64, #66, and #76 are red brick with white trim. The remaining buildings in Area J are buff colored brick with white trim, except for Building #62 which has dark brown trim. A large number of the buildings have slate roofs, but many have asphalt.

The buildings in Area J have been vacant from as long ago as 1980 to as recently as 1997. This accounts for the wide range of conditions encountered, particularly at the interiors. Structurally, the buildings appear to be sound, with the exception of Building #63, which is in very poor condition at both the interior and exterior.

The buildings of Area J are a mixture of one and two stories. All have basements, and the Post Hospital (#55) and the Band Barracks (#57) have finished attics. Many have porches, including Buildings #56, #57, #62, #65, and #66, although only those at Buildings #57 and #65 appear original, and the porch at Building #57 has been enclosed on the first floor. Buildings #55, #101, #102, and #103 have obviously had their original porches removed, since evidence of them is apparent at the brick work at their facades. At the Medical Detachment (#54), evidence shows, and available drawings and photographs support the fact, that one story dayrooms were removed at each end of the structure.

The buildings were designed to serve a wide variety of functions. As such, they range in size from small specialized structures such as the Dead House (#62) and Fire Station (#64) to larger structures such as the Hospital and the Barracks. The gross area of the buildings including basements at Area J is approximately 410,000 SF.

Having been built and altered over a period of 60 years, the Area J structures generally represent a predominant Colonial Revival style. This was a popular style for buildings in the U.S. from about 1880 through much of the first half of the twentieth century and is primarily exhibited in Buildings #53, #54, #56, #57, #62, #66, #76, #101, #102, #103, and #112. Of these, Buildings #53 and #54 also possess elements of the Colonial Revival's Georgian prototype. Variations or exceptions to the predominant Colonial Revival style in a number of the Area J buildings are as follows:

Building #55 has both Georgian and Neoclassical elements, such as its original (but missing) full-width porch and central entrance element.

Building #57 has strong Classical Revival elements with its large, gable roofed, 2-1/2 story entrance porch.

Building #63 exhibits a simple Greek Revival style, with its gabled roof, wide trim band beneath the roof, and front entry porches. These have been modified from their original appearance.

Based on historic photos, the Fire Station (#64) appears to originally have been Italianate in style, with a prominent hose-drying/siren tower, bracketed eaves, and segmental arch windows. However, its second floor and south side additions have radically altered its appearance.

Building #65 exhibits French Colonial style traits, with its steep, hipped roof and full-width porch under the overhanging roof.

The Administration, or Clock Tower (Building #67) exhibits classic Italianate styling, with its low pitched roof; bracketed eaves; tall, narrow segmental arch windows; and prominent tower.

Officer's Row

In general, Officer's Row is comprised of the residential buildings west of Taylor Avenue that housed either married or bachelor officers. The residential structures were constructed between 1879 and 1904, with the garages and golf course club house being built between 1927 and 1940. The houses and Bachelor Officer's Quarters (BOQ - Building #151) are generally solid masonry load bearing exterior walls with wood frame partitions, floors, and roofs. There are some additions to the rear of the structures that appear to be wood framed and have wood siding. The clubhouse has plywood siding, and the garages are either concrete or concrete block.

The exteriors of the single residences are buff colored brick with red asphalt shingle roofs and gray/beige trim. The double residence is a similar brick and trim color, but has what appears to be a gray slate roof. The BOQ is a red brick with white trim and also appears to have a gray slate roof.

The clubhouse is currently being leased to the Minneapolis Park and Recreation Board. The BOQ was used as quarters until it was vacated in 1980. The residences of Officer's Row were also used as quarters until they were vacated in 1970. Considering how long the buildings have been vacant, they generally appear to be sound structurally.

The buildings of Officer's Row are two stories with basements and unfinished attics. They all have porches, although some of the porches are not original. Only Buildings # 156 and # 157 appear to have their original porches; evidence of the original porches at Buildings #152, #153, #154, #155, #158, #159, #160, and #161 is apparent at their front brick work. The majority of the residences were designed as single family houses with approximately 1,400 square feet (SF) per floor. However, Building #157 was designed as a double house, with each side having just over 1,500 SF per floor. Many of them appeared identical, and it is likely that they were constructed from pattern book designs widely used by the military.

The BOQ was designed with approximately 7,000 SF per floor.

Not including the clubhouse, the gross area, including basements but not attics, of the residences and BOQ at Officer's Row is approximately 71,000 SF.

Stylistically, the buildings of Officer's Row are more cohesive than those of Area J, since they were generally built over a shorter time period. Also, since they served as residences, their uses did not significantly change during their history, and they have been altered less radically. The single and double residence structures generally represent late 19th century styles, including Eastlake, Italianate, and Georgian Revival which were popular styles of domestic buildings in the United States from approximately 1880 to 1900. Identifying features of this style include steeply pitched roofs of irregular shape, often with a dominant front-facing gable or dormer; bays, projections, or other ornamentation to avoid a smooth-walled appearance; and an asymmetrical facade with a partial or full-width porch which is usually one story high and extends along one or both side walls. Gables often are ornamented with decorative wood motifs.

Buildings #154, #156, #158 and #160 display many of the characteristics noted above for the Queen Anne style; however, they also have distinct characteristics of the French Second Empire, and its related Italianate, style. Such characteristics include mansard roofs; tall, narrow windows with elaborate crowns which are often curved; and decorative brackets under the eaves. Both the French Second Empire and the Italianate styling dominated urban housing in America between 1860 and 1880.

The BOQ (#151) is generally representative of the Colonial Revival style with its overall hipped roof; full-height, gable-roofed entry porch projection at the center of the facade; and full-width, flat roofed, wood porches. The central facade projection also exhibits influences of the Neoclassical style with its prominent square support columns and semi-circular fanlight at the front gable. This style, which is in turn made up of elaborations found in Early Classical Revival and Greek Revival styles, were very popular for domestic buildings in the United States during the first half of the 20th century. Interest in classical styles was rekindled by the World's Columbian Exposition held in Chicago in 1893.

Existing Site Conditions

Natural Resources

Survey notes, maps, paintings, drawings, journals, and reports dating from the 1800s, describe what is known as the Upper Bluff as being comprised of open prairie and marshes, with scattered oak and hickory trees. Also present were wooded bluff sites, probably goat prairies on east and southeast facing slopes. The Upper Bluff area is in a transition zone between upland prairies, wetlands, oak woods, and brush lands.

Most of the original plant and animal communities have been eliminated from the Upper Bluff, but several small remnants do still exist in the area. There are pre-1950s records of a population of Hill's Thistle (*Cirsium hillii*), a state list "Special concern Species", in the Upper Bluff area, which has often been found in the prairie-woodland transition zone. The previously noted populations have never been relocated, and are most likely extirpated from the area. However, there are remnant prairie and oak savanna communities nearby which could be linked with possible restoration areas, including parts of the Upper Bluff Area.

The Upper Bluff Area is separated from the main body of Fort Snelling Park by Minnesota State Highway 5. The Minnesota Department of Transportation and Fort Snelling State Park Staff have discussed a joint project on both sides of the Highway 5 corridor from Highway 494 to the Highway 62-55 interchange. The goal is to reestablish oak savanna and prairie communities in this area.

Throughout Area J area large number of bur oaks which were reportedly started from seedlings prior to 1900. Recent increment borings have yielded ages up to 101 years for those trees sampled. Prairie restoration can be enhanced by incorporating the Area J's natural resources into the highway corridor restoration zone. While Area J's plant communities are not a part of the original landscape, they do replicate important components of that landscape and have a good potential for restoration. Woodland and prairie restoration can be done regardless of what the final determination is for the cultural resources, including the historic structures.

The value of the preservation and restoration activities in Area J also greatly enhances the environmental education and interpretive opportunities for visitors to the area. This is especially true when the target audience is school age children and school groups. There is great value in being able to provide visitors with the opportunity to get a view of the river bluff area and its connection to the other natural communities. One of the best viewing areas of the Minnesota River Valley is from Building #62, the Dead House in Area J.

Site infrastructure

In January and February of 1998, the condition of all site utilities was assessed by a consulting engineering firm. They recommended that the electric, telephone, and gas lines be totally replaced. The primary lines for these utilities will be installed by the appropriate utility company at no cost to the owner. This work would be done at the time of site redevelopment.

Storm sewer and sanitary sewer lines were televised to determine their condition. The consultant recommended that these lines be cleaned of all sediment and debris. Slip lining of certain portions of these utilities may be necessary to repair line breaks.

The water system will need up-grading and repair in several areas. Up-grading the system to provide fire protection and potable water will likely be the most costly infrastructure improvement. Infrastructure improvements and costs are addressed in the Economic Analysis Projections chapter, starting on page 65 of this study.

According to the Golf Course and Polo Grounds lease, dated January 17, 2001, a new 12" water main loop was scheduled to be installed beginning in 2001. It was completed in 3 phases. See Appendix G for utility map.

Copies of utility drawings from Arden Environmental Engineering, Inc. that were prepared for the 1998 study, along with as-built utility drawings from the 1960's and 1970's were given to the Lower Minnesota River Watershed District to assist in understanding how storm water is handled on the site..

Roads and Parking

There are presently 2 miles of bituminous roadways on the site. The condition of these roadways varies significantly. Bloomington Road and Minnehaha Avenue were repaved by Hennepin County in 1997. The surface of Taylor Avenue is in poor condition, with numerous potholes present. Leavenworth Avenue is in good condition. The streets

behind Officer's Row and Area J are in fair condition. New roadwork would be minimal if no new buildings are added to the site.

Major parking at the site lies adjacent to the Polo Grounds. Parking for approximately 300 cars is afforded at this location. Parking for an additional 400 to 600 cars is available behind the Area J buildings. Much of the area described is already surfaced with bituminous and may only need to be overlaid and striped to serve as parking.

Parking for events where attendance is expected to be less than 5,000 people at anyone time can be accommodated on site if adequate directional signing is provided. Presently the availability of parking behind the barracks in Area J is not apparent to the first time user. Parking for major events, where attendance is expected to be more than 5,000 will require offsite parking. Off site parking at the Whipple Building maybe a possibility on weekends and weekdays after 5:00 pm. This parking area will account for 1000 to 1200 cars, and is within a few minutes walk of the Polo Grounds.

Additional parking at the LRT "Park and Ride" lot adjacent to the Whipple Federal Building is also now available.

Building Conditions

The buildings of the Fort Snelling Upper Bluff were evaluated as to their condition over a three day period in early December, 1997 by staff of Miller-Dunwiddie-Associates, Inc., Architects. All buildings were evaluated as to their exterior condition, and most buildings were entered so that the interior could be evaluated as well. Three of the buildings were not able to be entered.

The buildings of the Fort Snelling Upper Bluff were evaluated as to their conditions in March and April of 2006 by staff of Miller Dunwiddie Architecture and a structural engineer from Meyer, Borgman, Johnson. All buildings were evaluated as to their exterior condition, and all buildings were entered so that the interior could be evaluated as well. [Building T175, The golf course club house, was not evaluated and Building No. 63 was not entered]

In evaluating the buildings, it was assumed that they would undergo extensive renovations to fit a new reuse. Therefore, although items such as peeling paint and damaged plaster are unsightly, they appeared to be "cosmetic" and the result of roof leaks and/or no maintenance or heat over a long period of time, rather than being due to structural defects. As such, they were not considered significantly in the evaluations. Also, in all cases it was assumed that buildings would be re-roofed, windows would be replaced, and mechanical and electrical systems would be completely redone as part of any rehabilitation work; and they were therefore also not considered in the evaluations. Other assumptions pertinent to particular buildings or groups of buildings are noted in the discussion to follow.

An overview of the buildings follows. Note that hazardous materials have been assessed and will be discussed separately.

Area J

Exteriors: The brick and mortar is in generally good condition with some minor cracking through masonry units. Stone copings, sills, and belt courses are generally in good condition with selected weathered areas in need of repair or replacement. Some areas of stone foundations have been significantly eroded in the areas of downspouts. Wood elements (fascias, soffits, etc.) are generally in fair to good condition, with some areas of damage along eave lines. The amount of damage generally appears to vary according to how long a particular building had been vacant. Porches exist at Buildings #56, #57, #62, #65, and #66; but only those at Building #57 and #65 appear original. For the purposes of this report, it is assumed that they would be rehabilitated as is during any renovation work. Porches have obviously been removed at Buildings #54, #55, #101, #102, and #103. It is assumed that these would be restored as part of any rehabilitation.

Exteriors: The brick and mortar is in generally fair condition with some minor cracking through masonry units and quite a bit of re-pointing needing to be done. Stone copings, sills, and belt courses are generally in fair condition with selected weathered areas, particularly those of Platteville limestone, in need of repair or replacement. Areas of stone foundations, brick and mortar have been significantly eroded in the areas of some downspouts. Wood elements (fascias, soffits, etc.) are generally in fair to good condition, with some areas of damage along eave lines. The amount of damage generally appears to vary according to how long a particular building has been vacant. Porches exist at buildings No. 56, No. 57, No. 62, No. 65 and No. 66; but only those at building No. 57 and No. 65 appear original. Porches have obviously been removed at Buildings No. 54, No. 55, No. 101, No. 102 and No. 103. It is assumed that these would be restored as part of any rehabilitation.

Interiors: Again, based on when they were vacated, interior conditions range from poor to very good. Some could be re-inhabited immediately if utilities were reestablished. Only the Quarter Master's Building (#63) and the Barracks buildings (#101, #102, #103) did not rank as good, very good, or excellent. Area J buildings are more likely able to support a wider variety of reuses, primarily because of their sizes (they range from 7,200 SF to 51,000 SF) as well as their more flexible structural systems. Because of that, the condition of the particular features inside each building did not weigh heavily in the evaluations, since it is assumed that there would be extensive interior renovations in most cases. The possible exceptions to that would be unique structures such as the Gym/Service Club (#53) and the Band Barracks (#57).

Interiors: Based on when they were vacated, interior conditions range from beyond repair to between good and very good. None of the buildings were rated very good or excellent. Area J buildings are more likely able to support a wider variety of reuses, primarily because of their sizes (they range from 7,200 SF to 51,000 SF) as well as their more flexible structural systems. Because of that, the condition of the particular features inside each building did not weigh heavily in the evaluations, since it is assumed that there would be extensive interior renovations in most cases. The possible exceptions to that would be unique structures such as the Gym (No. 53) and the Band Barracks (No. 57).

Officer's Row

Exteriors: The brick and mortar is in generally good condition with some minor cracking through masonry units. Stone copings, sills, and belt courses are generally weathered and need repair or replacement. Some areas of stone foundations have been significantly eroded in the areas of downspouts. Wood elements (fascias, soffits, etc.) are generally in fair condition, with some areas of damage along cave lines near roof valleys. Porches are not original, except at building 157, and it is assumed that all the original porches would be restored as part of any rehabilitation. Their conditions have therefore not been considered in the evaluation.

Exteriors: The brick and mortar is in generally fair condition with some minor cracking through masonry units and quite a bit of re-pointing needing to be done. Stone copings, sills and belt courses are generally weathered, particularly those of Platteville limestone, and need repair or replacement. Some areas of stone foundations, brick and mortar have been significantly eroded in the areas of downspouts. Wood elements (fascias, soffits, etc.) are generally in fair condition, with some areas of damage along eave lines near roof valleys. Porches are not original, except at Buildng No.157, and it is assumed that all the original porches would be restored as part of any rehabilitation. Their conditions have therefore not been considered in the evaluation.

Interiors: Considering that all buildings on Officer's Row, with the exception of the Bachelor Officer's Quarters, have been vacant since 1970, the interiors of the buildings were in surprisingly good shape. Discounting their appearance due to the peeling paint and/or damaged plaster already noted, most of the buildings were classified as being in good condition. There were some areas where fireplace mantles and stair balusters and rails had been removed, but in most cases they were still in the buildings. Likewise, most trim and moldings were intact. Only building 152 was noted as being in poor condition on the interior, due primarily to a large hole in the roof. With the above information as background, the results of the building evaluations are indicated on the "Building Analysis and Cost Estimate" beginning on page 63 (73).

Interiors: The interiors of the buildings on Officer's Row have deteriorated quite a bit since the 1998 study. Most are in fair condition. There are some areas where fireplace mantles and stair balusters and rails have been removed, but in most cases they are still in the buildings. Likewise, most trim and moldings are intact. Building #152 and #154 were noted as being in poor condition on the interior. Building #156 and #161 were noted as being between poor and fair condition.

With the above information as background, the results of the building evaluations are indicated on the "Building Analysis and Cost-Estimate" found in Appendix D. Also see Appendix A containing photographs of each building.